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# VICTORIAN ENTOMOLOGIST



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*News Bulletin of The Entomological Society of Victoria Inc.*

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# THE ENTOMOLOGICAL SOCIETY OF VICTORIA (Inc)

## MEMBERSHIP

Any person with an interest in entomology shall be eligible for Ordinary membership. Members of the Society include professional, amateur and student entomologists, all of whom receive the Society's News Bulletin, the Victorian Entomologist.

## OBJECTIVES

The aims of the Society are:

- (a) to stimulate the scientific study and discussion of all aspects of entomology,
- (b) to gather, disseminate and record knowledge of all identifiable Australian insect species,
- (c) to compile a comprehensive list of all Victorian insect species,
- (d) to bring together in a congenial but scientific atmosphere all persons interested in entomology.

## MEETINGS

The Society's meetings are held at the 'Discovery Centre', Lower Ground Floor, Museum Victoria, Carlton Gardens, Melway reference Map 43 K5 at 8 p.m. on the third Tuesday of even months, with the exception of the December meeting which is held on the second Tuesday. Lectures by guest speakers or members are a feature of many meetings at which there is ample opportunity for informal discussion between members with similar interests. Forums are also conducted by members on their own particular interest so that others may participate in discussions.

## SUBSCRIPTIONS

Ordinary Member	\$20.00 (overseas members \$22)
Country Member	\$16.00 (Over 100 km from GPO Melbourne)
Student Member	\$12.00
Associate Member	\$ 5.00 (No News Bulletin)

Associate Members, resident at the same address as, and being immediate relatives of an ordinary Member, do not automatically receive the Society's publications but in all other respects rank as ordinary Members.

**LIFE MEMBERS:** P. Carwardine, Dr. R. Field, D. Holmes, Dr. T. New, Dr. K. Walker.

Cover design by Alan Hyman.

**Cover illustration:** The pale Sun Moth, *Synemon selene* Klug, is an endangered species restricted to perennial grassland dominated by *Austrodanthonia* in Western Victoria. It is now extinct in SA, and was presumed extinct in Vic. until its rediscovery, in February 1991, by the late Frank Noelker and Fabian Douglas. The Victorian Populations are parthenogenetic with all specimens comprising females, a most unusual trait in the Castniidae. Illustration by Michael F. Braby.

## MINUTES OF THE ANNUAL GENERAL MEETING 17 APRIL 2007

The meeting was opened at 8:08 pm

**Present:** L. Cookson, P. Carwardine, D. Dobrosak, M. Malipatil, P. Marriott, K. Walker, G. Weeks.

**Visitors:** L. Gibson. R. McBride.

**Apoloies:** I. Endersby, D. Stewart

**Minutes:** The minutes of the 21 April 2006 Annual General Meeting [*Vic. Ent.* 36(3): 41] were accepted. M: L. Cookson. S: P. Marriott

### President's Report:

The President thanked all those who contributed to the on-going success of the Society.

**Treasurer's Report :** The Treasurer is currently overseas, his report is included in the April issue.

### General Business

It was moved that subscriptions be increased as per Ian's report plus the addition of an electronic delivery of *Vic. Ent.* option at \$20. M: P. Marriott, S: P. Lillywhite. Carried unanimously.

Peter Lillywhite proposed that the AGM review membership subscriptions be and discussed and reviewed at each AGM. M: P. Lillywhite, S: L. Cookson. Carried.

It was moved that Sid Cowling be appointed as Auditor for 2007. M: P. Marriott, S: G. Weeks. Carried.

**2006 Le Souëf Award committee report:** Peter McMillan received the 2006 Le Souëf Award.

**Conservation and Entrecs committee:** This committee is in recess (refer to motion *Vic. Ent.* 35(3) 41). Committee reports were Accepted M: P. Marriott, S: K. Walker.

Geoff Weeks took on role as Public Officer and accepted nominations. Mr Weeks declared the following duly appointed as the number of nominations equalled the positions in each case.

President:	P. Marriott
Secretary	S. Curle
Treasurer.	I. Endersby
Editor:	D. Dobrosak
Public Officer:	I. Endersby
Councillors.	K. Walker. P. Lillywhite.

The appointments were accepted. M: K. Walker, S: R. Vagi. Carried.

The meeting closed 8:36

**Speaker:**

Peter Marriott presented a powerpoint presentation on Hemiptera. Mali Malipatil provided expert commentary and Ian Endersby (in absentia) provided a booklet to all present "A Guide to the Order Hemiptera (True Bugs)"

**MINUTES OF THE GENERAL MEETING 17 APRIL 2007**

The meeting was opened at 9:40 pm

**Present:** L. Cookson, P. Carwardine, D. Dobrosak, M. Malipatil, P. Marriott, K. Walker, G. Weeks.

**Visitors:** L. Gibson, R. McBride.

**Apologies:** I. Endersby, D. Stewart

The minutes of the 20 February 2007 General Meeting [*Vic. Ent.* 37(2): 13] were accepted. M: P. Carwardine, S: P. Lillywhite.

David King and Henry Rich were accepted to membership.

Lucinda Gibson and Rachael McBride were nominated for membership.

Meeting closed 9:44

**Minutes of the Council Meeting 15 May 2007**

**Present:** P. Carwardine, S. Curle, I. Endersby, P. Lillywhite, P. Marriott, K. Walker.

**Apologies:** D. Dobrosak, D. Stewart

**Minutes:**

Minutes of the Council Meeting [*Vic. Ent.* 37(2): 14] were accepted. M: I. Endersby, S: P. Marriott.

**Correspondence:**

- Received notification of the Australian Museum photographic competition: Up Close and Spineless. The competition is open to amateur and professional photographers and has four entry categories: Primary School, Secondary School, Open and Professional. Competition closes Friday 31 August 2007. Further details at: [http://www.amonline.net.au/up\\_close/competition.htm](http://www.amonline.net.au/up_close/competition.htm)
- Peter McMillan, winner of the Le Souëf award, has requested that the prize money be put towards the purchase of a new digital camera.



**Treasurer's Report:** General account \$6129, Le Souëf account \$4879 minus Le Souëf award. 38 people have yet to pay this years membership renewal.

**Editor's report:** No information received for this meeting.

**General Business:**

**Subscription Revision:**

It was agreed at the general meeting to increase the general subscription rate with only one minor change. That being that if a member wishes to receive both electronic and paper versions of the news bulletin, the subscription rate would be that of the paper subscription; with both versions being sent out.

**Le Souëf Award:**

Ian Endersby to send out call for nominations for this years Le Souëf award. Traditionally, Ian would target all entomological, Royal and capital city Field Naturalist's groups.

**Exchange with Beiträge zur Entomologie:** Daniel Dobrosak has initiated this publication and information exchange.

**Field Naturalists Club of Victoria's Terrestrial Invertebrate Group (TIG):**

Peter Marriott to progress the options of working close with the TIG.

**Website Name:**

Steve Curle proposed that we acquire a domain name for the society. Suggested nominations were [www.vicent.com.au](http://www.vicent.com.au) or [www.vicent.org.au](http://www.vicent.org.au).

This would be associated with the existing website. It was motioned to progress with this proposal.

**Next Meetings:**

June: Agenda item - "The Following Year"

August: Peter Carwardine to follow up the presenter for August.

October excursion: Peter Marriott to follow up entomological contacts for a potential excursion to Keith Turnbull Research Institute in Frankston.

Meeting closed at 17:39

*Hesperilla donnyisa* Hewitson (LEPIDOPTERA: HESPERIIDAE) and *Jalmenus evagoras* (Donovan) (LEPIDOPTERA: LYCAENIDAE)  
Survivors of the 2002 Canberra Fire Storm.

D.J. Ferguson

7 Noarlunga Crescent, Bouyithon, ACT, 2905

The Canberra fire storm of January 2002 burnt through the Brindabella Mountain Range. As a result the Gibraltar Creek valley was severely burnt. This valley contained a mixture of ecologies, from commercial *Radiata* pine plantations and cleared grazing land at its lower reach, dense wet sclerophyll forest down-stream of the Gibraltar Falls, to meadows of snow grass, *Poa* sp. L. and alpine ash, *Eucalyptus delegatensis* R.T. Baker at its highest elevation. The valleys diverse and rich ecology have struggled to return since the fire, made worse by the prevailing dry weather conditions.

From several visits to the area, the latest in March 2007, two butterfly species thought to have been lost to the fire have been observed, renewing hope for the continuation of these populations.

The rarely seen Varied Sedge-Skipper, *Hesperilla d. donnyisa* Hewitson, occurred where *Gahnia subaequiglumis* S.T. Blake grow in the drainage areas near the meadows of snow grass. The fire reduced the *Gahnia* to black mounds so severely burnt they looked unlikely to survive. However, it was not long before new growth appeared after the fire. In the recent visit, shelters of joined leaves created by skipper larvae were found on several of the *Gahnia* clumps. Two pupae, one hatched and the other dead were also found.

The Imperial Hairstreak, *Jalmenus evagoras* (Donovan) had previously been found among stands of silver wattle, *Acacia dealbata* Link, growing in the lower part of the valley. The fire reduced these wattle stands to charred sticks. The *Acacia* soon grew back and in 2006 *J. evagoras* were again observed in this area. In the latest visit, the past seasons emerged pupal cases and over wintering eggs placed in bark crevices were observed.

Nomenclature is based on Braby (2000) and Burbridge and Gray (1979).

#### Acknowledgement

I am grateful to Dr Christine Lambkin of the Queensland Museum, Brisbane for helpful comments on earlier versions of this note.

#### References

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# The Rediscovery of the Moth *Molybdurga metallophora* Meyrick, 1897 (Lepidoptera: Heliodinidae) and its Systematic Position.

E.D. Edwards & G. Cocking

CSIRO Entomology, GPO Box 1700, Canberra, ACT 2601.

## Abstract

The moth *Molybdurga metallophora* Meyrick, 1897 has been collected for the first time since 1877 and is now recorded from Tasmania. Its family placement in the Heliodinidae is discussed. Records and foodplants for other Australian Heliodinidae are given as an aid to future collection of these under-collected moths.

## Introduction

*Molybdurga metallophora* Meyrick, 1897, was described from a single female collected at Melbourne, Vic. in October 1877 by the Rev. G.H. Raynor (Meyrick 1897). The holotype female (Fig. 1) is in The Natural History Museum, London, although Hsu & Powell (2005) stated that its whereabouts was unknown. *Molybdurga* was described to include only *M. metallophora* and no other species has subsequently been ascribed to the genus. *M. metallophora* is a small moth, as are other heliodinids, with a wingspan of 8mm.

Meyrick initially placed the genus in an extensive family Elachistidae which encompassed genera from a wide range of current families including Batrachedridae, Cosmopterigidae, Elachistidae, Oecophoridae (Stathmopodinae) and others. Later, Meyrick (1913) included the genus in an extended concept of the Heliodinidae and in Meyrick (1914a) he similarly included it in the Heliodinidae together with a range of genera now placed in other families. Meyrick (1914a; plate 2, fig. 20) also illustrated the holotype in colour in a somewhat stylised painting which nevertheless gave a good impression of the moth. Turner (1941) followed Meyrick, including the genus in a broad view of the Heliodinidae. Our modern concept of the family Heliodinidae was established by Kyrki (1984), and Common (1990), Nielsen & Common (1991) and Nielsen (1996) placed in it two genera (*Heliodines* Stainton, 1854 and *Epicroesa* Meyrick, 1907) which occur in Australia. Nye & Fletcher (1991) included *Molybdurga* in the modern concept of Heliodinidae but Common (1996) placed it in the Stathmopodinae (of the family Oecophoridae). Edwards (2003) listed it under the Stathmopodinae but stated that it may belong in the Heliodinidae. Recently, Hsu & Powell (2005) published a review of the family Heliodinidae and listed *Molybdurga* as of uncertain family position.

## Observations

On 14 January 2007, one of us (GC) collected a single female of *Molybdurga metallophora* at light at Stumpys Bay, north eastern Tasmania. The light was on the boundary of a plain with mixed coarse grass and low heath vegetation and taller riparian forest of *Eucalyptus* and *Acacia* and about 200m from a narrow strip of vegetation on the sandy foreshore of the ocean beach. This specimen, now lodged in the Australian National Insect Collection (ANIC), is the second specimen of this species which has otherwise not been seen since 1877 (P. Marriott and K. Walker pers. comm.). It is the first record of the species from Tasmania and also the first record of any Heliodinidae from Tasmania (L. Hill, E.L. Martin, P.B. McQuillan and C. Young pers. comm.).



Hsu & Powell (2005) listed seven apomorphies for the family: 1, pupa with strong lateral ridges; 2, pupa with long stiff dorsal bristles; 3, head smooth scaled; 4, tegumen of male genitalia hooded; 5, apophyses anteriores of female genitalia with ventral branches originating from a fused medial sclerotised band forming a bridge between them; 6, vein Cul<sup>2</sup> absent in forewing; 7, vein M3 absent in forewing.

In the Tasmanian specimen characters 3, 5-7 theoretically may be checked but because only a single modern specimen is known we have not dissected the female genitalia or mounted a pair of wings on a slide. However the head is smooth scaled (3), vein Cul<sup>2</sup> is absent (6) and according to Meyrick (1914a) M3 is absent (7) and certainly one or some of the veins originating from the distal part of the cell are absent in the Tasmanian specimen. The presence and arrangement of the silver metallic scale tufts on the forewing is characteristic of many heliodinids. These features are all consistent with a placement in the Heliodinidae.

## Discussion

The Australian heliodinid fauna is small and very poorly represented in collections and information on the species and their biology may greatly aid further study of the family in Australia

In their review Hsu & Powell restricted true *Heliodines* to a single species, *H. roesella* (L.) from Europe, and treated the Australian "*Heliodines*" *princeps* Meyrick, 1906, as possibly belonging to a new genus for which they used "*Heliodines*" rather than describe a new genus. This species is known from seven specimens from Brisbane, Kuranda and Cedar Bay, Qld. The genus *Epicroesa* Meyrick, 1907, is known from three described species in Australia. *E. aubrosia* Meyrick, 1907, was described from three specimens including both sexes from Cairns, Qld and is known from specimens in the ANIC from Burpengary just north of Brisbane, Townsville, Cairns and Kuranda in Qld. It was illustrated in Nielsen (1996). *E. metallifera* Meyrick, 1907, was described from Duarina, Qld from a single female. Meyrick subsequently acquired three more specimens but the species has not been seen since. *E. thiasarcha* Meyrick, 1907, was taken in the Cairns district and at Kuranda by F.P. Dodd during his residence there and was described from two specimens, one of each sex, from Cairns, Qld, and was illustrated in Meyrick (1914b). There are specimens of three undescribed species in the ANIC; one from near Rockhampton, Qld, one from Darwin, NT and one from Kalumburu, WA.

Nothing is known of the larval foodplants of "*Heliodines*" *princeps* and trying to deduce a possible foodplant for *M. metallophora* from the European *H. roesella* which feeds on several Chenopodiaceae and Phytolaccaceae seems unwarranted. The biology of *Epicroesa* sp. from the Seychelles was described by Floater (1995) where larvae fed in the seeds and adults fed in the flowers of *Pisonia sechellarium* (Nyctaginaceae) and larvae, possibly of another species of *Epicroesa*, fed on the leaves of *Pisonia grandis*. There is a record of *E. metallifera* from *Pisonia aculeata* in The Natural History Museum (Hsu & Powell 2005) although the origin of the record is not mentioned and nor is it mentioned in Meyrick's description or in Meyrick (1914b). A species of *Epicroesa* from Japan feeds on *Kalopanax* (Araliaceae) but this is a geographically isolated species. The remaining foodplant records for the Heliodinidae are from New World species and the majority of these also feed on Nyctaginaceae. However there are no Nyctaginaceae in Tasmania (Hewson 1984) and we are unable to suggest a likely foodplant for *M. metallophora*.

Species of Heliodinidae seem to be rarely collected in Australia and it is possible that they seldom come to light. Overseas many, possibly all, of the species are diurnal. Paying careful attention to likely foodplants may result in the discovery of more species in Australia. Plants of the "Bird-lime tree", or *Pisonia*, in tropical localities should especially be investigated when flowering, for adults of *Epicroesa*. Species of *Pisonia* occur widely in Australia in rainforest and monsoon forest: with *P. umbellifera* found in littoral forest along the coast of Queensland and New South Wales as far south as Jervis Bay (Floyd, 1989), *P. grandis* is a dominant tree on some islands of the Great Barrier Reef and *P.*



*aculeata* is distributed widely around the northern coast from the Kimberleys, Northern Territory and Queensland south to near Brisbane.

### Acknowledgements

Vanna Rangsi kindly prepared the illustration from a photograph. Lionel Hill, Peter Marriott, Ted Martin, Peter McQuillan, Ken Walker and Cathy Young kindly checked collections or lists for records of *M. metallophora*.

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Fig. 1. The holotype female of *Molybdurga metallifera* in The Natural History Museum, London.

## Up Close & Spineless Photographic Competition 2007

Yes, it's on again - the competition that puts animals without a backbone on the map! Over 99% of all animal species are invertebrates (animals without a backbone). These comprise over 30 major animal groups and over 5 million species! To raise awareness of the wonderful world of invertebrates, the Australian Museum is holding the photographic competition Up Close & Spineless.

The competition is open to amateur and professional photographers and has 4 entry categories: Primary School, Secondary School, Open and Professional. All you have to do is choose the category that's right for you, start taking photos and send us your best by Friday 31 August 2007. Winners of the first 3 categories will win a digital camera. Winners of the Professional category will win \$600 to spend on photographic supplies. The terms and conditions of entry are included on the registration form which can be obtained from the Competition Organiser.

### How do I enter?

- All photographs must be submitted as a 20 x 25 cm (8 x 10 inches) print.
- Think of a title for each photograph and write 50 words describing the subject and how the photo was taken.
- Enclose the relevant fee for your category (\$10 for School categories, \$15 for Open and Professional). Fee includes all photos entered.
- Fill in the Registration Form and send it with your photos (maximum 3 per entrant) by Friday 31 August 2007 to:

Ms Fara Pelarek - Competition Organiser  
Australian Museum  
6 College Street  
Sydney NSW 2010

phone (02) 9320 6165; fax (02) 9320 6072

### How will the photos be judged?

Judging criteria will be based upon:

- interesting behaviour
- aesthetics
- composition
- unusual or rare species
- high technical standards such as sharpness
- and correct exposure

Check out the Australian Museum website for hints on improving your photographs of invertebrates at [www.australianmuseum.net.au](http://www.australianmuseum.net.au)

# Some Old Butterfly Records From Lake Murray, Papua New Guinea

R. GRUND

9 Parkers Rd, Torrens Park, Adelaide, S.A., 5062

## INTRODUCTION

During some oil drilling operations near Lake Murray in Papua New Guinea (Western Province) in 1973, the author was fortunate to be able to have a quick perusal of the butterfly population at a nearby site to the drilling rig during one afternoon. About 3 hours were spent at the site (~ 7° 10', 141° 20') on 20 October, which was adjacent to a road that was specially constructed westwards from Lake Murray (south) to the drill site. The habitat was dense lowland rainforest, ~ 20m asl, in a low karst limestone environment in which no free water ever collected from the abundant rainfall (3000mm). The butterfly collecting occurred mostly within the forest, but also roadside along the edge of the newly cleared forest. The author presently holds the collection.

## LIST OF BUTTERFLIES (nomenclature based on Parsons 1998)

### HESPERIIDAE

\**Notocrypta waigensis waigensis*

### PAPILIONIDAE

\**Pachliopta polydorus quecuslandicus*

\**Papilio aegaeus ormenus*

### PIERIDAE

\**Eurema puella virgo*

\**Appias celestina galerus*

### NYMPHALIDAE

\**Tellervo zoilus antipatrus*

\**Euploea leucostictos form usipetes*

\**Taenaris catops*

*Mycalesis dionchietii emineus*

*Mycalesis mucia mucia*

*Mycalesis pernotata*

*Mycalesis plidion plidionides*

\**Hypocysta angustata*

*Neptis brebissonii*

\**Hypolimnas alimena libisomia*

\**Yoma sabina algina*

\**Cethosia cydippe damasippe* (yellow form)

\**Cuplia prosope turneri*



## LYCAENIDAE

*Dicallaneura decorata decorata*

\**Praetaxila segecia punctaria*

*Arhopala doreena*

*Arhopala herculina*

\**Danis danis apollonius*

*Danis melinuos*

*Danis ptirosso*

\**Jamides aleuas nitidus*

\**Pithecops dionisius dionisius*

\* Species also recorded from Cape York-Torres Strait

The interest in these butterflies for this paper was that the locality is reasonably close to Torres Strait and Cape York Peninsula (~ 400 km), and butterfly movement between the two localities is not impeded by any major topographic barrier. Some 27 species were recorded of which only 17 are also known from Cape York-Torres Strait (Braby 2000), although all genera except *Dicallaneura* are represented in Australia. The inference being, "Why didn't the remaining butterflies also establish themselves on the Cape area, such as during the Pleistocene glacial maxima when the sea levels were much lower", and in particular *Dicallaneura decorata*. Both the latter and *Praetaxila segecia* (both Riodinids) were common within the forest. Interestingly, none of the *Mycalis* satyrid species from the site are known from Australia, and only one of the *Danis* species from the Mullerian *Danis* mimicking is present in Australia.

## REFERENCES

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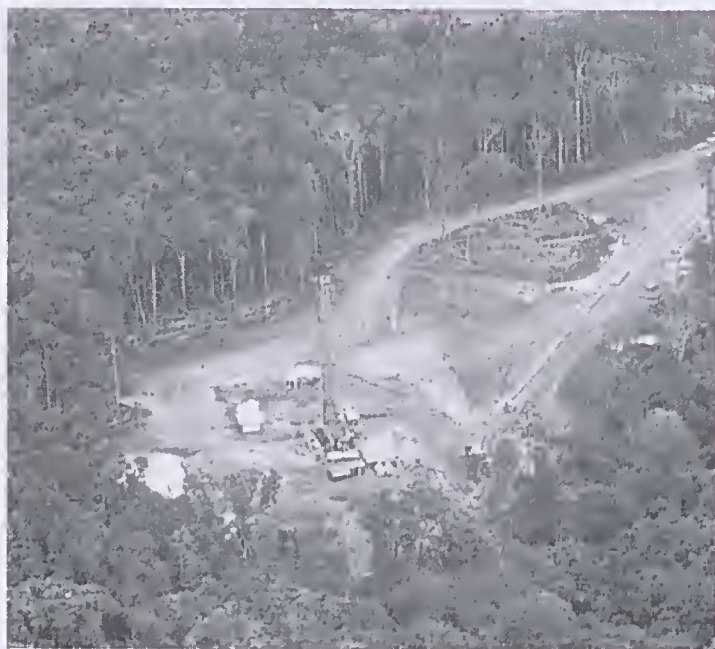
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Lake Murray (south), boat landing site, looking west along road works.



Roadworks and tall rain-forest near butterfly locality.



Drill rig and tall timber.

## Robert W. (Bob) Hay

1917 - 2007

Those of us fortunate enough to know Bob will always hold fond memories of him, and enduring respect for his contribution to the study of insects.

Bob and his close friend Hugh Bollam began collecting butterflies together in the early 1970s, after they discovered at a chance meeting that they shared a passion for butterflies. With so little known about Western Australia's butterflies at that time, Bob and Hugh sought out the collection at the WA Museum to find localities for some of the rarer species, and thus met Terry Houston.

In retirement, Bob and Hugh devoted much of their time to butterflies, and over the years amassed a huge amount of previously unknown information about the distributions and biology of many of our native species. Bob had also amassed a large collection of Western Australian butterflies and, through exchanging specimens with other collectors, of Australian and overseas butterflies. In 1989 Terry Houston had the idea to mount an exhibition of butterflies at the WA Museum using Bob's specimens, to share their beauty with a wider audience.

This exhibition had many fortunate consequences: it led to the formation of the WA Insect Study Group (now Society) and, most fortunately for me, led to my meeting Bob in 1990. Bob Hay was a foundation member of the WA Insect Study Society, and instrumental in its formation and success. The exhibition and Bob's enthusiasm also revived my own interest in butterflies, and at the same time I discovered that this interest was shared by a colleague and friend at CALM, Andy Williams.

With access to Bob's vast knowledge of the native WA butterflies, my vast ignorance of them was soon overcome. Bob, as was his nature, was very generous of his time and information. In the 1990s Bob and I travelled together on many field trips in search of butterflies. Bob's knowledge was encyclopaedic, but little of this was documented and known only by word of mouth amongst the 'butterfly community'. Through Bob's contacts in this community, Andy and I met and worked with a number of other butterfly enthusiasts and with Bob's collaboration we published much of this information.

Although a keen collector of butterflies, Bob knew that collecting has little impact on a healthy butterfly population; he wanted butterflies to be conserved for future generations and saw the great enemy of butterflies and nature conservation generally was habitat destruction. Bob's enthusiasm for butterflies was infectious; he had many wonderful stories about collecting trips, and the good luck and occasional disappointments on them. One of his favourite stories was of his trip to Cape Arid with Ross Field in 1993, in search of *Ogyris idmo*. They arrived at Mt Ragged to discover that much of the area had been devastated by a huge bushfire, and all that remained were the blackened stems of mallee. Despite this, 'idmo' was abundant. Bob tells how he sat down to rest for a moment, when he felt something crawling up his leg; just as he was about to swat it, thinking it was a fly, he looked down to see a freshly emerged female specimen of *O. idmo* walking up his leg. Much to his delight, Bob successfully collected it by hand (I believe this feat has never been equalled, but I cannot help but think it must have been the unluckiest insect ever born, to have chosen to walk up the leg of the only butterfly collector within a thousand kilometres!)

Because Bob was so familiar with our butterflies, he became the contact point in WA for anyone working on them. During the 1980s and 1990s almost every butterfly collector to visit WA would seek out Bob to get local knowledge on where to find particular species. Bob's hospitality and that of his wife Lois was legendary, and he would happily share his knowledge and discuss opinions. Over the years he provided help and information to various people and institutions, including Ted Edwards and the late Ebbe Nielsen from CSIRO in their search for sun moths. Ted in particular was very grateful for Bob's records of both butterflies and sun moths, and when Ted and Alan Graham described a new species of butterfly from Western Australia, they named it *Mesodina hayi* in Bob's honour ("...whose efforts have kindled a resurgence of interest in the butterflies of Western Australia and who has provided generous assistance to both authors over many years"). In 1996 Bob was also honoured with the Zoo le Souëf Memorial Award, for his significant contribution to the knowledge of Australian insects, particularly butterflies.

In later life both Bob and Lois suffered health problems, and Bob gave up travelling in to the field and attending meetings of the society so that he could provide more support to Lois. Despite this, his enthusiasm for butterflies never waned, and he was always pleased to hear what was happening in the "butterfly world". Bob will be warmly remembered as one who made an outstanding contribution to entomology, and enriched the lives of all who knew him.

Matt Williams



## Worldwide Dragonfly Association International Symposium

The Worldwide Dragonfly Association held its fifth biennial International Symposium of Odonatology at Swakopmund, Namibia, from 16-10 April 2007. Over 100 delegates and partners attended. The National Museum of Namibia had offered to host the symposium as part of its centenary celebrations.

After various welcomes the event was opened by the Minister of Youth, National Service, Sport and Culture and a special set of postage stamps featuring Namibian dragonflies was launched; these two activities offering numerous photo opportunities for the local press.

The first of the plenary papers, given by Stanislav Gorb of the Max Planck Institute for Metals Research, reviewed the Odonate head arrester system which immobilises the head during feeding or when the dragonfly is in tandem flight. Not only are there phylogenetic implications but the locking mechanism could be a useful model in mechanical fasteners. Michael May (Rutgers University) gave the phylogenetic plenary based on molecular sampling of nearly all recognised subfamilies of Odonata. Australian's all let us rejoice for our endemic *Hemiphysbia mirabilis* is still basal to all of the other Zygoptera. *Epiophysbia* (Anisozygoptera) is sister to all other Anisoptera. Recent other studies which had suggested that part of the Lestidae lay within the Anisoptera were not supported.

Other plenaries covered a summary of dragonfly movements categorised as maiden, seasonal, commuting or migration flights (David Thompson, Liverpool University); the different strategies evolved for coping with temporary waters or permanent waters with predators (Frank Johansson, Umeå University, Sweden); and the different thermoregulatory responses of fliers and perchers (May and Philip Corbet)

Amongst the contributed papers the Australian contributions were the spatial distribution of larval Gomphids from Jolin Hawking and a summary of a forthcoming paper by Gunther Theischinger which distinguishes the monotypic *Dendroaeschma* as the sole southern member of the Brachytronidae, the subfamily being elevated to family status. Of the other 46 oral presentations they can be categorised as: Faunal surveys and conservation status within a region including the use of volunteers (8 papers); habitat preference including indicators of environmental condition (8); conservation of individual species (4); climate change and range expansion (4); reproductive strategies including male display and sperm competition (8); the ever popular female colour dimorphism (3); and fossil Odonata (2). Additional topics were biogeography, chemical resistance, diurnal activity, flight performance, larval feeding morphology, phylogeny, polarisation of vision and selective predation on wing colour. A few which particularly caught the ear were telemetry using a small responder to a signal rather than a heavier transmitter, immune response to predators and parasites, and, for all you bureaucrats, the value of the Odonata as service providers. Now you know where odonatological research is heading.

Twenty-two posters were displayed and each author was given five minutes during the oral sessions to describe and advertise their work.

An important plenary seminar was held on the morning following the Conference Dinner, but still to good effect. The WDA sees the need for a Global Biodiversity Assessment for Odonata under the auspices of the IUCN Special Species Commission. William Darvill (IUCN), using the amphibia as an example, described the information that should be assembled and Viola Clausnitzer, retiring chair of

the IUCN Odonata Specialist Group, summarised the information that had already been included in the IUCN Species Information Service (SIS) database by clandestine means. Although funding for the project has not yet been achieved, global red listing and regional assessments have allowed a large number of species to be incorporated. A next step is to collate point locality data and, if you know of specimen-based electronically available data for Australian species and localities, I am very keen to hear from you. [endersby@mira.net](mailto:endersby@mira.net)

To commemorate the Symposium and to aid the subsequent field trips Frank Suhling and Andreas Martens published the 'Dragonflies and Damselflies of Namibia', a comprehensive guide with keys, descriptions and colour photographs for the 130 species from the country together with another 20 that might arrive one day. Also launched was the bilingual 'Juwelenschwingen/Gossamer Wings', a book based on the magical close-up and high-speed photography of Dagmar and Georg Rüpell. Warwick and Michèle Tarbuton also had copies of their 'A fieldguide to damselflies of South Africa' a companion to the earlier dragonfly volume. Philip Corbet proudly displayed a copy of his 'Dragonflies: behaviour and ecology of Odonata' which has just been translated into Japanese.

At the closing ceremony it was time to thank the three key organisers, Eugène Marais, Frank Suhling and Andreas Martens and to see the sacred wooden baton handed on to representatives who will host the 6th Symposium in Xalapa, Mexico in 2009.

I. Endersby

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The Society welcomes contributions of articles, papers or notes pertaining to any aspect of entomology for publication in this Bulletin. Contributions are not restricted to members but are invited from all who have an interest. Material submitted should be responsible and original. The Editor reserves the right to have articles refereed. Statements and opinions expressed are the responsibility of the respective authors and do not necessarily reflect the policies of the Society.

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Contributions may be typed on A4 paper or sent to the Hon. editor on an IBM formatted disk in *Microsoft Word for Windows* with an enclosed hard copy. The main text of the news bulletin is prepared in 8 point, *Book Antiqua* font (please do not use fixed point paragraph spacing). Contributions may preferably be E-mailed to Internet address: [suturalis@yahoo.com](mailto:suturalis@yahoo.com)

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Tuesday 19th June

Members' Night. Members and visitors will give short presentations

Tuesday 17th July

Council Meeting

Tuesday 21st August

General Meeting

Scientific names contained in this document are *not* intended for permanent scientific record, and are not published for the purposes of nomenclature within the meaning of the *International Code of Zoological Nomenclature*, Article 8(b). Contributions may be refereed, and authors alone are responsible for the views expressed.

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